



**DMM-3349**  
**Second Year B. Sc. (Sem. IV) Examination**  
**April / May - 2016**  
**Applied Electronics : Paper - III**  
**(Embedded System)**

Time : Hours]

[Total Marks : 50

**Instruction :**

<p>नीचे दृष्टावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लिखवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : <b>SECOND YEAR B. Sc. (SEM. 4)</b></p> <p>Name of the Subject : <b>APPLIED ELECTRONICS - 3</b></p> <p>Subject Code No. : <b>3 3 4 9</b> Section No. (1, 2,.....) : <b>Nil</b></p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; margin-top: 10px;">Student's Signature</div>
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- 1 Answer in short : 8
- (a) Give the long form of CLPA, DA, ANAL A,@ R0, DJNZ.
  - (b) Explain following instruction :-ADD, ANL CLR CPL.
  - (c) Give the bit definition of PSW register of 8051.
  - (d) What is a Flag w.r.t 8051?
- 2 (a) How many instruction types are there in 8051 instruction set ? 7
- (b) Give the INTERNAL STRUCTURE of RAM and explain. 7

**OR**

- 2 (a) What do you understand by addressing mode in 8051? How many addressing modes are there in 8051 controller? 7
- (b) Explain the STACK and the STACK POINTER of memory in 8051. 7

- 3** Short notes on : (any two) **14**
- (a) 8051 Serial ports
  - (b) Three CONTROL REGISTER of 8051
  - (c) PIN Diagram of 8051
  - (d) Microcontroller timer and counter
- 4** Write programme : (any two) **14**
- (a) Write a program to flash LED 10 times.
  - (b) Interfacing an LCD to 8051.
  - (c) Write program to add and subtract.
  - (d) Write a program to transfer 'A' to 'Z' letter continuously using second serial port.
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